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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,045	06/29/2006	Konrad Roeingh	HM-729PCT	2579
40570	7590	07/28/2010		
Lucas & Mercanti LLP 475 Park Avenue South New York, NY 10016			EXAMINER PATEL, VISHAL A	
			ART UNIT 3676	PAPER NUMBER
			MAIL DATE 07/28/2010	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/585,045	Applicant(s) ROEINGH ET AL.	
	Examiner Vishal Patel	Art Unit 3676	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The 112 rejection below are still applicable since applicant has not provided a certified translation of the application (e.g. foreign application which applicant relies on).

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Unclear what applicant means by roller burnished, furthermore this limitation is considered to be a process limitation and given no patentable weight in an apparatus claim (e.g. [E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process).

For the purpose of examination the term rolled and/or roller-burnished is considered to be a process limitation, since after application of roller-burnished method the sealing surface is work hardened and its roughness is minimized (e.g. see application specification page 5,

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paragraph 2). The examiner agrees that roller-burnished creates a hard sealing surface but they are many known methods to form a hard sealing surface.

It is also noted that applicant has not claimed a hard surface which is smooth and that the sealing surface is coated.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1 and 4-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Robotham (US. 6,375,195).

Robotham clearly discloses all the limitations of claims 1 and 4-5. For example a device having a sealing ring (e.g. 6), roll neck or roll bush (e.g. 4), a holder (e.g. 14) having elastic sealing elements (e.g. 13a-13b), the sealing elements are supported by the body 13 or springs in the sealing elements and a chock (e.g. 9). The sealing ring (e.g. 6) having a sealing surface that is a coated with metal (e.g. column 2, lines 65-68) which is hard (e.g. chrome coating which provides a smooth hard surface). The sealing ring is fastened to the roll neck (e.g. column 2, lines 63-65, the sealing ring is fastened since it rotates on the roll neck after being mounted on the roll neck). Furthermore the member 5 prevents the sealing ring from moving axially.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robotham in view of Draskovich et al (e.g. 5,544,897).

Robotham disclose the invention substantially as claimed above but fail to disclose that the sealing surface is nitrided (particular process of nitriding is considered to be method limitation and given little patentable weight in an apparatus claim particular a nitrided coating is taught). Draskovich discloses a device having a sealing element (e.g. 22) contacting a sealing ring (e.g. 32) that has a coating of nitrided (e.g. 42). It would have been obvious to one having ordinary skilled in the art at the time of the invention to have the metal coating (e.g. chrome coating) Robotham to be replaced by a nitrided coating as taught by Draskovich, since having one metal coating replaced by another is considered to be art equivalent (column 3, lines 4-5 of Draskovich).

6. Claims 1, 3 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Robotham in view of Yoshida (US. 7,063,193).

Robotham discloses the invention substantially as claimed above but fails to disclose that the sealing surface is treated with hardening treatment and also a coating on the hardened sealing surface as argued by applicant (e.g. process that causes the sealing surface be hardened, which is claimed by applicant and argued). Yoshida discloses a sealing ring (e.g. sealing ring having a contact surface 200) with a cylindrical surface (e.g. surface 200 that is contacted by the lip seal 127e, figure 7), the cylindrical surface is a hardened surface (e.g. column 15, lines 29-30), the cylindrical surface has an oxidizing treatment (e.g. provides oxidized sealing surface, column 15,

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lines 42-47), the cylindrical surface also has a coating including one of PTFE, Nickel dispersion plating, Chrome plating and electroless Nickel plating. It would have been obvious to one having ordinary skill in the art at the time of the invention to have the sealing surface of Robotham to have a hardened surface which is oxidized and have a coating as taught by Yoshida, to provide corrosion resistant, superior strength, heat resistant and anti wearing property (e.g. column 15, lines 38-42 of Yoshida).

7. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Robotham and Yoshida as applied to claims above, and further in view of Draskovich et al.

Robotham and Yoshida disclose the invention substantially as claimed above but fail to disclose that the sealing surface has nitride (particular process of nitriding is considered to be method limitation and given little patentable weight in an apparatus claim particular a nitrided coating is taught). Draskovich discloses a device having a sealing element (e.g. 22) contacting a sealing ring (e.g. 32) that has a coating of nitride (e.g. 42). It would have been obvious to one having ordinary skill in the art at the time of the invention to have the metal coating of Robotham to be replaced by a nitride coating as taught by Draskovich, since having one metal coating replaced by another is considered to be art equivalent (column 3, lines 4-5 of Draskovich).

Response to Arguments

8. Applicant's arguments filed 10/14/08 have been fully considered but they are not persuasive.

Applicants' argument that the sealing ring of Robotham does not have a roller burnished sealing surface is not persuasive since the roller burnished is considered to be a process

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limitations and all applicant has in the specification is that the surface is cylindrical and this is taught by Robotham. If applicant disagrees with this limitation being taught by Robotham, the second rejection applies (paragraph 7).

Applicants' argument that the sealing ring of Robotham does not teach the structure created by the process of roller burnished is not persuasive since all the sealing surface has to be is work hardened and its roughness is minimized is taught by the chrome coating of Robotham.

Applicants' argument with regard that neither Robotham nor Yoshida teach a roller burnished sealing surface is not persuasive since as stated above that roller-burnished is still a process limitation that provides a sealing surface that is work hardened and its roughness is minimized, this is what is taught by Yoshida which has a sealing surface 200 that is work hardened to provide strength of sliding portion and anti-wear property, meaning hard surface that is smooth surface and also teaches to coat the hard surface in column 15, lines 43-47 of Yoshida).

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is 571-272-7060. The examiner can normally be reached on 6:30am to 8:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer H. Gay can be reached on 571-272-7029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/V. P./

Primary Examiner, Art Unit 3676

/Vishal Patel/

Primary Examiner, Art Unit 3676